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=> fil reg; d que 13
FILE PREGESTRY! ENTERED AT 12:44:32 ON 30 MAY 2002
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 STRUCTURE FILE UPDATES:
                          28 MAY 2002
                                       HIGHEST RN 422506-41-0
 DICTIONARY FILE UPDATES:
                          28 MAY 2002
                                       HIGHEST RN 422506-41-0
 TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001
   Please note that search-term pricing does apply when
   conducting SmartSELECT searches.
Crossover limits have been increased. See HELP CROSSOVER for details.
Calculated physical property data is now available. See HELP PROPERTIES
for more information. See STNote 27, Searching Properties in the CAS
Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf
L2
             259 SEA FILE=REGISTRY ABB=ON [PLECQ].F.[RHECSD][HFY]W..[FQL]/SQSP
2 SEA FILE#REGISTRY ABB#ON 12 AND SOL 11
                                                 sequence length less than 11
dern cn kwic nte 13 1-2; fil capl; d que 14
L3
     ANSWER 1 OF 2 REGISTRY COPYRIGHT 2002 ACS
     393113-23-0 REGISTRY use Registry # to match sequence to citation
RN
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CN
     aspartyl-L-tyrosyl-L-tryptophyl-L-.alpha.-glutamylglycyl- (9CI) (CA INDEX
     NAME)
SQL
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SEQ
         1 PRFMDYWEGL
           -----
HITS AT 1-10
     ANSWER 2 OF 2 REGISTRY COPYRIGHT 2002 ACS
L3
    267004-47-7 REGISTRY
RN
     Peptide, (Pro-Xaa-Phe-Xaa-Asp-Tyr-Trp-Xaa-Xaa-Leu) (9CI)
CN
                                                              (CA INDEX NAME)
OTHER NAMES:
     109: PN: WO0024782 SEQID: 142 claimed protein
CN
CN
     727: PN: WO0183525 TABLE: 13 claimed protein
SQL 10
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 type
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                                               description
uncommon
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uncommon
               · Aaa-4
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FILE COVERS 1907 - 30 May 2002 VOL 136 ISS 22 FILE LAST UPDATED: 29 May 2002 (20020529/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

L2 259 SEA FILE=REGISTRY ABB=ON [PLECQ].F.[RHECSD][HFY]W..[FQL]/SQSP

L3 2 SEA FILE=REGISTRY ABB=ON L2 AND SQL<11
L4
3 SEA FILE=CAPLUS ABB=ON L3

€=> d 1bib ab hitrn 14 1-3 ,

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:829830 CAPLUS

DOCUMENT NUMBER:

136:128583

TITLE:

QSAR: hydropathic analysis of inhibitors of the

p53-mdm2 interaction

AUTHOR(S):

Galatin, Peter S.; Abraham, Donald J.

CORPORATE SOURCE:

Department of Medicinal Chemistry and Institute for Structural Biology and Drug Discovery, Virginia Commonwealth University, Richmond, VA, 23298, USA

Proteins: Structure, Function, and Genetics (2001),

45(3), 169-175

SOURCE:

CODEN: PSFGEY; ISSN: 0887-3585

PUBLISHER: DOCUMENT TYPE:

Wiley-Liss, Inc.

LANGUAGE:

Journal English

AB To date, a no. of p53-derived peptides have been evaluated in vitro for their ability to inhibit the carcinogenic p53-mdm2 interaction. Design of second-generation nonpeptidic compds. requires the redn. of large peptide structures down to small mols. maintaining the proper spatial arrangement of key functional groups. Mol. modeling software exists that can predict and rank intermol. interactions from the p53-mdm2 complex crystal structure. Such analyses can yield a pharmacophore model suitable as a search query for a 3D chem. database to generate new lead compds. As preliminary validation of this methodol., the Hydropathic INTeractions (HINT) program has been used to generate noncovalent interaction measurements between reported peptide inhibitors and mdm2. Quant. structure-activity relationships were developed expressing peptide

activity as a linear combination of hydropathic descriptors. HINT measurements accurately modeled the effects of even single-atom alterations of the p53-peptide structure on activity, accounting for 70-90% of variation in exptl. inhibition consts. These results surpassed those of a recently described mol. dynamics-based approach and required significantly less computation time. In conclusion, the HINT program can be integrated into the drug design cycle for next-generation p53-mdm2 complex inhibitors with confidence in its ability to simulate this noteworthy protein-protein interaction.
393113-23-0 - We Registry # to match citation to sequence

RL: PAC (Pharmacological activity); BIOL (Biological study)

(QSAR hydropathic anal. of inhibitors of p53-mdm2 interaction)

REFERENCE COUNT:

38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 2 OF 3 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2001:816705 CAPLUS

DOCUMENT NUMBER:

INVENTOR(S):

135:366701

TITLE:

Fc-domain-modified peptides as therapeutic agents Feige, Ulrich; Liu, Chuan-Fa; Cheetham, Janet C.;

Boone, Thomas Charles; Gudas, Jean Marie

PATENT ASSIGNEE(S): SOURCE:

Amgen Inc., USA

PCT Int. Appl., 176 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English.

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	PATENT NO.					KIND DATE			APPLICATION NO.					DATE				
								-										
WO	2001083525			Α	2	20011108			W	0 20	01-บ	S143	10	20010502				
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		ВJ,	CF,	CG,	·CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG		,	
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AB peptides and a process for prepg. pharmaceutical agents using biol. active peptides. In this invention, pharmacol. active compds. are prepd. by a process comprising: a) selecting at least one peptide that modulates the activity of a protein of interest; and b) prepg. a pharmacol. agent comprising an Fc domain covalently linked to at least one amino acid of the selected peptide. Linkage to the vehicle increases the half-life of the peptide, which otherwise would be quickly degraded in vivo. preferred vehicle is an Fc domain. The peptide can be selected, for example, by phage display, E.coli display, ribosome display, RNA-peptide screening, yeast-based screening, chem.-peptide screening, rational design, or protein structural anal.

267004-47-7 IT

> RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(Fc-domain-modified peptides as therapeutic agents)

ANSWER 3 OF 3 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2000:291095 CAPLUS

DOCUMENT NUMBER:

132:329919

TITLE:

Modified peptides containing an antibody Fc domain as

```
therapeutic agents
```

INVENTOR(S): Feige, Ulrich; Liu, Chuan-fa; Cheetham, Janet; Boone,

Thomas Charles

PATENT ASSIGNEE(S):

Amgen Inc., USA

SOURCE:

PCT Int. Appl., 608 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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PATENT NO.
                     KIND
                           DATE
                                          APPLICATION NO.
                                                            DATE
                                           _____
    WO 2000024782
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                            20000504
                                           WO 1999-US25044
                                                           19991025
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            CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
            IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
            MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
            SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ,
            BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
            DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
            CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    EP 1144454
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                      A2
                           20011017
                                          EP 1999-971003
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            IE, SI, LT, LV, FI, RO
    NO 2001001963
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                                           NO 2001-1963
                                                            20010420
PRIORITY APPLN. INFO.:
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                                                        P
                                                            19981023
                                        US 1999-428082
                                                         Α
                                                           19991022
                                        WO 1999-US25044 W
                                                           19991025
```

The present invention concerns fusion of Fc domains with biol. active peptides and a process for prepg. pharmaceutical agents using biol. active peptides. In this invention, pharmacol. active compds. are prepd. by a process comprising: (a) selecting at least one peptide that modulates the activity of a protein of interest; and (b) prepg. a pharmacol. agent comprising an Fc domain covalently linked to at least one amino acid of the selected peptide. Linkage to the vehicle increases the half-life of the peptide, which otherwise would be quickly degraded in vivo. The preferred vehicle is an Fc domain. The peptide is preferably selected by phage display, Escherichia coli coli display, ribosome display, RNA-peptide screening, or chem.-peptide screening.

IT **267004=47-7D**, fusion protein with IgG1 Fc domain

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (Mdm/hdm antagonist; modified peptides contg. an antibody Fc domain as therapeutic agents)

=> fil reg; d que 12

ELLE REGISTRY' ENTERED AT 12:45:09 ON 30 MAY 2002

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STRUCTURE FILE UPDATES: 28 MAY 2002 HIGHEST RN 422506-41-0 DICTIONARY FILE UPDATES: 28 MAY 2002 HIGHEST RN 422506-41-0

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

L2 259 SEA FILE REGISTRY ABB=ONZE PLECO REGISTRY BB=ONZE PLECO REGIS

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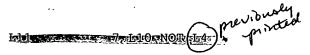
FILE COVERS 1907 - 30 May 2002 VOL 136 ISS 22 FILE LAST UPDATED: 29 May 2002 (20020529/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L2 259 SEA FILE=REGISTRY ABB=ON [PLECQ].F.[RHECSD][HFY]W..[FQL]/SQSP
L6 175 SEA FILE=CAPLUS ABB=ON L2
L8 1418 SEA FILE=CAPLUS ABB=ON MDM2 OR MDM 2

L9 20552 SEA FILE=CAPLUS ABB=ON P53 OR P 53
HT0 8 SEA FILE=CAPLUS ABB=ON L6-AND (L8:OR-L9)



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L11 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2002 ACS 2000:537884 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

133:246812

TITLE:

Discovery of Potent Antagonists of the Interaction between Human Double Minute 2 and Tumor Suppressor

AUTHOR(S):

Garcia-Echeverria, Carlos; Chene, Patrick; Blommers,

Marcel J. J.; Furet, Pascal

CORPORATE SOURCE:

Oncology Research and Core Technologies, Novartis

Pharma Inc., Basel, CH-4002, Switz.

SOURCE:

PUBLISHER:

Journal of Medicinal Chemistry (2000), 43(17),

3205-3208

CODEN: JMCMAR; ISSN: 0022-2623 American Chemical Society

DOCUMENT TYPE:

Journal English

LANGUAGE:

As part of a drug discovery program to identify antagonists of the p53/hdm2 (human double minute 2) protein-protein interaction, the authors have attempted to det. the amino acid specificities of hdm2's binding pockets to establish a pharmacophore model for this protein-protein interaction. This work has resulted in the identification of highly potent peptide antagonists. Structural information has been exploited to increase the hdm2-binding affinity of short peptide motifs derived from the N-terminal domain of the human wild-type p53 protein. Combining conformational constraints as selected by mol. modeling with functional groups that are able to establish addnl. electrostatic and van der Waals interactions with the hdm2 protein, the authors have been able to increase the hdm2-binding affinity of the authors initial peptide 1700-fold. Particularly interesting is the increase in binding affinity obtained by replacing tryptophan with 6-chlorotryptophan (IC50 = 314 nM vs. IC50 = 5 nM, 63-fold). interactions identified and exptl. confirmed in this work could be directly applied to the optimization of nonpeptidic leads or incorporated into the "de novo" design of antagonists of the p53/hdm2 protein-protein interaction.

IT =201984=21=6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(discovery of potent antagonists of interaction between human double minute 2 and tumor suppressor p53)

REFERENCE COUNT:

THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS 35 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2002 ACS 1999:585620 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

131:334394

TITLE:

Isolation and characterization of APSE-1, a

bacteriophage infecting the secondary endosymbiont of

Acyrthosiphon pisum

AUTHOR(S):

van der Wilk, Frank; Dullemans, Annette M.; Verbeek,

Martin; van den Heuvel, Johannes F. J. M.

CORPORATE SOURCE:

Department of Virology, DLO Research Institute for

Plant Protection (IPO-DLO), Wageningen, 6700 GW, Neth.

SOURCE: Virology (1999), 262(1), 104-113 CODEN: VIRLAX; ISSN: 0042-6822

Academic Press

DOCUMENT TYPE: LANGUAGE:

Journal English

A bacteriophage infecting the secondary endosymbiont of the pea aphid Acyrthosiphon pisum was isolated and characterized. The phage was tentatively named bacteriophage APSE-1, for bacteriophage 1 of the A. pisum secondary endosymbiont. The APSE-1 phage particles morphol. resembled those of species of the Podoviridae. The complete nucleotide sequence of the bacteriophage APSE-1 genome was elucidated, and its genomic organization was deduced. The genome consists of a circularly permuted and terminally redundant double-stranded DNA mol. of 36524 bp. Fifty-four open reading frames, putatively encoding proteins with mol. masses of more than 8 kDa, were distinguished. ORF24 was identified as the gene coding for the major head protein by N-terminal amino acid sequencing of the protein. Comparison of APSE-1 sequences with bacteriophage-derived sequences present in databases revealed the putative function of 24 products, including the lysis proteins, scaffolding protein, transfer proteins, and DNA polymerase. This is the first report of a phage infecting an endosymbiont of an arthropod. (c) 1999 Academic Press.

249918=08=9, Protein P41 (bacteriophage APSE-1) IT

RL: PRP (Properties)

(amino acid sequence; isolation and characterization of APSE-1, bacteriophage infecting secondary endosymbiont of Acyrthosiphon pisum) REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1999:241567 CAPLUS

DOCUMENT NUMBER:

131:42875

TITLE:

p53 mediated death of cells overexpressing

MDM2 by an inhibitor of MDM2

interaction with p53

AUTHOR(S):

Wasylyk, Christine; Salvi, Roberto; Argentini, Manuela; Dureuil, Christine; Delumeau, Isabelle;

Abecassis, Joseph; Debussche, Laurent; Wasylyk, Bohdan

CORPORATE SOURCE:

Institut de Genetique et de Biologie Moleculaire et Cellulaire, CNRS/INSERM/ULP, Illkirch, 67404, Fr.

Oncogene (1999), 18(11), 1921-1934

CODEN: ONCNES; ISSN: 0950-9232

PUBLISHER:

Stockton Press

DOCUMENT TYPE:

Journal

LANGUAGE:

SOURCE:

English

The p53 tumor suppressor is frequently inactivated in human AB tumors. One form of inactivation results from overexpression of MDM2, that normally forms a neg. auto-regulatory loop with p53 and inhibits its activity through complex formation. authors have investigated whether disrupting the MDM2p53 complex in cells that overexpress MDM2 is sufficient to trigger p53 mediated cell death. The authors find that expression of a peptide homolog of p53 that binds to MDM2 leads to increased p53 levels and transcriptional activity. The consequences are increased expression of the down-stream effectors MDM2 and p21WAF1/CIP1, inhibition of colony formation, cell cycle arrest and cell death. There is also a decrease in E2F activity, that might have been due to the known phys. and functional interactions of MDM2 with E2F1/DP1. However, this decrease is p53 dependent, as are also colony formation, cell cycle arrest and cell death. These results show that a peptide homolog of p53 is sufficient to induce p53 dependent cell death in cells overexpressing MDM2, and support the notion that disruption of the p53-MDM2 complex is a target for the development of therapeutic agents.

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(p53-MDM2 inhibitor; p53 mediated death

of human osteosarcoma cells overexpressing MDM2 by inhibitor

of MDM2 interaction with p53 in relation to)

REFERENCE COUNT:

96 THERE ARE 96 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1998:709096 CAPLUS

DOCUMENT NUMBER:

129:326112

TITLE:

Mdm2 binding domain conjugates for delivery

of therapeutic and diagnostic substances to cells with

inefficient mdm2-p53 degradation

pathway

INVENTOR(S):

Lane, David Philip

PATENT ASSIGNEE(S):

University of Dundee, UK PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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	WO	9847919			. A1 19			19981029			0 19	98-GI	B1140	19980420				•
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AU 9870642 A1 199								_						19980420				
PRIORITY APPLN. INFO.:								•	GB 1997-8089						19970422			
						•				WO 1998-GB1140					1998		-	

AB Mdm2 binds to p53 in cells in which mdm2 is not overexpressed, i.e. in cells in which mdm2 is expressed at normal or low levels, and this interaction targets p53 for degrdn. The invention exploits this mechanism of p53 degrdn. to stabilize a substance comprising a mdm2 binding domain linked to a coupling partner in cells in which this mdm2 mediated degrdn. pathway does not operate efficiently. In contrast, in normal cells expressing functional mdm2, the substance will tend to be unstable as it will be marked for degrdn. through the interaction of the endogenous mdm2 with the mdm2 binding domain of the substance. Accordingly, the substances can be used to deliver the coupling partner to such cells, e.g. for use in the diagnosis and/or treatment of cancer, viral infections or other conditions assocd. with non functional p53 or mdm2.

IT <215295=80=0.

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (TIP (thioredoxin insert protein) 12/1 peptide; mdm2 binding domain conjugates for delivery of therapeutic and diagnostic substances to cells with inefficient mdm2-p53 degrdn. pathway)

L11 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1998:708953 CAPLUS

DOCUMENT NUMBER:

1998:708953 CAPL

TITLE:

Materials and methods relating to inhibiting the

```
interaction of p53 and mdm2, and
```

use for treatment of cancer, viral infections, or

other conditions Lane, David Philip

PATENT ASSIGNEE(S): / University of Dundee, UK SOURCE: PCT Int. Appl., 52 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

INVENTOR(S):

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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PATENT NO.
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             NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
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PRIORITY APPLN. INFO.:
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                                                           19970422
                                        WO 1998-GB1144
                                                         W 19980420
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AB Mdm2 binds to p53 in cells in which mdm2 is not overexpressed, i.e. in cells in which mdm2 is expressed at normal or low levels, and that in these cells, this interaction targets the p53 for degrdn. This finding means that inhibiting mdm2 prodn. and/or inhibiting the binding of mdm2 to p53 allows levels of p53 to increase by reducing the clearance of p53 by mdm2, and can be used to activate p53 function in cells other than those in which mdm2 is overexpressed. This allows the use of an agent having the property of disrupting the binding of p53 and mdm2 or inhibiting the prodn. of mdm2 in a population of cells, in the prepn. of a medicament for activating p53, wherein the population of cells do not overexpress mdm2. Such medicaments are useful in the treatment of conditions such as cancer, viral infections or conditions in which p53 or mdm2 is not functional. Peptide aptamer inserts into thioredoxin created potent inhibitors of the p53mdm2 interaction.

IT ~215295=80-0

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(peptide aptamer#insert TIP 12/1; agents and methods for inhibiting p53-mdm2 interaction, and use for treatment of cancer, viral infections, or other conditions, and screening method)

L11 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1998:65923 CAPLUS

DOCUMENT NUMBER:

128:128291

TITLE:

Preparation of compounds (peptides) capable of binding

to MDM2 for inhibition of the binding of

MDM2 to p53 protein

INVENTOR(S):

Lane, David; Bottger, Volker; Bottger, Angelika;

Picksley, Stephen; Hochkeppel, Heinz-Kurt;

```
Garcia-Echeverria, Carlos; Chene, Patrick; Furet,
PATENT ASSIGNEE(S):
                         Novartis A.-G., Switz.; Cancer Research Campaign
                         Technology Ltd.; Lane, David; Bottger, Volker;
                         Bottger, Angelika; Picksley, Stephen; Hochkeppel,
                         Heinz-Kurt; Garcia-Echeverria, Carlos; Chene, Patrick;
                         Furet, Pascal
                         PCT Int. Appl., 46 pp.
SOURCE:
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English -
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                      KIND
                             DATE
                                            APPLICATION NO.
                                                              DATE
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WO 9801467
                       Α2
                            19980115
                                           WO 1997-EP3549
                                                             19970704
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             DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ,
             LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL,
             PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US,
             UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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                                           CA 1997-2259149
                                                             19970704
                     . AA
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    AU 9738479
                                           AU 1997-38479
                       A1
                            19980202
                                                             19970704
     EP 958305
                       A2
                            19991124
                                           EP 1997~935511
                                                             19970704
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                                                             19970704
     US 2001018511
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                                           US 1999-214371
                                                             19990326
PRIORITY APPLN. INFO.:
                                        GB 1996-14197
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                                                             19960605
                                        GB 1997-7041
                                                          Α
                                                             19970407
                                        WO 1997-EP3549
                                                          W
                                                             19970704
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OTHER SOURCE(S): MARPAT 128:128291

AB The present invention relates to compds. capable of binding to the oncogene protein MDM2, processes for the prepn. of such compds., pharmaceutical prepns. comprising such compds., and uses of said compds., e.g. in the therapeutic (including prophylactic) treatment of an animal or esp. of the human body (no data given). The title compds. R1XFXR2R3WXXR4 (R1 = Pro, Leu, Glu, Cys, Gln; X = natural amino acid; F = Phe; R2 = Arg, His, Glu, Cys, Ser, preferably Asp; R3 = His, Phe, preferably Tyr; W = Trp; R4 = Phe, Gln, preferably Leu) and their derivs. were prepd. on Milligen 9050 automated peptide synthesizer by using the std. Boc and Fmoc chem.

IT =201984=53-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of peptides as inhibitors of the binding interaction between $\mbox{\sc MDM2}$ and protein $\mbox{\sc p53})$

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of peptides as inhibitors of the binding interaction between MDM2 and protein p53)

L11 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1996:752178 CAPLUS

DOCUMENT NUMBER:

126:112803

TITLE:

Identification of novel mdm2 binding

peptides by phage display

AUTHOR(S):

Bottger, Volker; Bottger, Angelika; Howard, Stephanie

F.; Picksley, Steven M.; Chene, Patrick;

Garcia-Echeverria, Carlos; Hochkeppel, Heinz-Kurt;

Lane, Daivd P.

CORPORATE SOURCE:

Cancer Res. Campaign Lab., Univ. Dundee, Dundee, DD1

4HN, UK

SOURCE:

Oncogene (1996), 13(10), 2141-2147

CODEN: ONCNES; ISSN: 0950-9232

PUBLISHER:

Stockton Journal

DOCUMENT TYPE: LANGUAGE:

English

The oncogene mdm2 and its human homolog hdm2 bind to the tumor suppressor protein p53 and inactivate its function as a transcription factor. This has been implied as a possible mechanism for cancer development in several tumors including human sarcomas. mdm2-p53 interaction is therefore a much persued target for the development of anti-cancer drugs. In order to find novel high affinity ligands for hdm2 which would interfere with its binding to p53 we screened phage display peptide libraries for mdm2 binding phage. We found a series of 12 and 15mer peptides which interact strongly with hdm2. The peptide sequences show striking homol. with the previously established mdm2 binding site on p53, confirming that the peptide defined 18TFSDLW23 region is crucial for the interaction but that contact between the two mols. extends to position L26 on p53. Free synthetic peptides derived from the phage selected sequences proved to be up to 100 times stronger inhibitors of the p53-mdm2 interaction than the p53 derived wt-peptide in several ELISA-assays. This illustrates the potency of phage display libraries in the search for new peptide based lead structures designed to mimic or inhibit therapeutically important protein-protein interactions.

JΥ ~186180=20=1P~186180=21=2P~186180=22=3P* 186180=23=4P=186180=24-5P-186180-25-6P

RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); BIOL (Biological study); PREP (Preparation) (identification of novel mdm2 binding peptides by phage display)

-->-sel-hit-rn-lll-1-7-

El-THROUGH = E25=ASSIGNED - Let Registry #'s selected out of citations,

Crossed over into Registry & combined w/ seg. search

answer set

ELLE REGISTRY ENTERED AT 12:46:35 ON 30 MAY 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 28 MAY 2002 HIGHEST RN 422506-41-0 DICTIONARY FILE UPDATES: 28 MAY 2002 HIGHEST RN 422506-41-0

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details. Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

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@ decresql kwic nte 112 1-25, fil hom these are the hit segs from the preceeding citations
           ANSWER 1 OF 25 REGISTRY COPYRIGHT 2002 ACS
           Protein P41 (bacteriophage APSE-1) (9CI)
                                                                                             (CA INDEX NAME)
 OTHER NAMES:
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          ANSWER 4 OF 25 REGISTRY COPYRIGHT 2002 ACS
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      .alpha.-glutamylglycyl-L-leucyl-L-asparaginyl-.beta.-alanyl-N6-{5-
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     ANSWER 6 OF 25 REGISTRY COPYRIGHT 2002 ACS
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HITS AT: 6-15
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L-Prolinamide, N-acetyl-L-cysteinylglycyl-L-glutaminyl-L-prolyl-L-threonyl-

ANSWER 7 OF 25 REGISTRY COPYRIGHT 2002 ACS

L12

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L-phenylalanyl-L-seryl-L-.alpha.-aspartyl-L-tyrosyl-L-tryptophyl-L-lysyl-L-
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            ANSWER 8 OF 25 REGISTRY COPYRIGHT 2002 ACS
L12
            L-Prolinamide, N-acetyl-S-[2-(dimethylamino)-6-(1-oxo-2-propenyl)-1-
            naphthalenyl]-L-cysteinylglycyl-L-glutaminyl-L-prolyl-L-threonyl-L-
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modification
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modification
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L12
           ANSWER 9 OF 25 REGISTRY COPYRIGHT 2002 ACS
           L-Aspartamide, L-methionyl-L-prolyl-L-arginyl-L-phenylalanyl-L-methionyl-L-
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            ANSWER 10 OF 25 REGISTRY COPYRIGHT 2002 ACS
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   HITS AT:
                             3-12
   SEQ
                         1 TGPAFTHYWA TF
                                 HITS AT:
                              3-12
   L12 ANSWER 11 OF 25 REGISTRY COPYRIGHT 2002 ACS
               \hbox{$L$-Histidinamide, 1-acetyl-$L$-prolyl-$L$-alanyl-$L$-phenylalanyl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-seryl-$L$-s
               arginyl-L-phenylalanyl-L-tryptophyl-L-seryl-L-.alpha.-aspartyl-L-leucyl-L-
               seryl-L-alanylglycyl-L-alanyl-, trifluoroacetate (salt) (9CI) (CA INDEX
               NAME)
   SQL 15
  RN 201984=45-4 REGISTRY
   SEQ
                         1 PAFSRFWSDL SAGAH
                             ========
                             1-10
   HITS AT:
   NTE modified
                                                                                                              description
                                             ----- location -----
    terminal mod.
                                           Pro-1
                                                                                                            N-acetyl
```

```
terminal mod. His-15 modification -
                                       C-terminal amide
                                       undetermined modification
RN==201984=45=4 REGISTRY
 SEQ .
         1 PAFSRFWSDL SAGAH
          ========
 HITS AT:
          1-10
 SEO
         1 PAFSRFWSDL SAGAH
          -------
 HITS AT:
          1-10
     ANSWER 12 OF 25 REGISTRY COPYRIGHT 2002 ACS
L12
     L-Tyrosinamide, 1-acetyl-L-prolyl-L-arginyl-L-prolyl-L-alanyl-L-leucyl-L-
     valyl-L-phenylalanyl-L-alanyl-L-.alpha.-aspartyl-L-tyrosyl-L-tryptophyl-L-
     .alpha.-glutamyl-L-threonyl-L-leucyl-, trifluoroacetate (salt) (9CI) (CA
     INDEX NAME)
SQL
    15
RN 201984-43-2 REGISTRY
SEO
        1 PRPALVFADY WETLY
          -----
HITS AT: 5-14
NTE modified
 type ----- location ----- description
 ______
terminal mod. Pro-1
terminal mod. Pro-1 - N-acetyl
terminal mod. Tyr-15 - C-terminal amide
modification - undetermined modification
                                     N-acetyl
______
RN==201984=43=2 REGISTRY
SEQ
        1 PRPALVFADY WETLY
HITS AT:
          5-14
SEO
        1 PRPALVFADY WETLY
              HITS AT: 5-14
L12 ANSWER 13 OF 25 REGISTRY COPYRIGHT 2002 ACS
     L-Valinamide, N-acetyl-L-isoleucyl-L-alpha.-aspartyl-L-arginyl-L-alanyl-L-
     prolyl-L-threonyl-L-phenylalanyl-L-arginyl-L-alpha.-aspartyl-L-histidyl-L-
     tryptophyl-L-phenylalanyl-L-alanyl-L-leucyl-, trifluoroacetate (salt)
          (CA INDEX NAME)
SQL
RNy 201984-41-0 REGISTRY
SEO
        1 IDRAPTFRDH WFALV
HITS AT: 5-14
NTE modified
        ----- location ----- description
terminal mod. Ile-1 - N-acetyl
terminal mod. Val-15 - C-terminal amide
modification - undetermined modification
RN 201984-41-0 REGISTRY
```

```
1 IDRAPTFRDH WFALV
 SEO
           5-14
HITS AT:
         1 IDRAPTFRDH WFALV
 SEO
 HITS AT:
           5-14
     ANSWER 14 OF 25 REGISTRY COPYRIGHT 2002 ACS
L12
 CN
     L-Phenylalaninamide, N-acetyl-L-valyl-L-glutaminyl-L-asparaginyl-L-
     phenylalanyl-L-isoleucyl-L-.alpha.-aspartyl-L-tyrosyl-L-tryptophyl-L-
     threonyl-L-glutaminyl-L-glutaminyl- (9CI) (CA INDEX NAME)
 SOL
RN 201984-39-6 REGISTRY
         1 VQNFIDYWTQ QF
 SEQ
 HITS AT:
           2-11
NTE modified
                ----- location ----- description
 type ·
 terminal mod.
                Val-1
                                        N-acetyl
 terminal mod. Phe-12
                                        C-terminal amide
    ANSWER 15 OF 25 REGISTRY COPYRIGHT 2002 ACS
L12
 CN
     L-Prolinamide, N2-acetyl-L-glutaminyl-L-.alpha.-glutamyl-L-threonyl-L-
     phenylalanyl-L-seryl-L-.alpha.-aspartyl-L-tyrosyl-L-tryptophyl-L-lysyl-L-
     leucyl-L-leucyl-, trifluoroacetate (salt) (9CI) (CA INDEX NAME)
SOL
     12
<RN2</p>
201984=38-5
REGISTRY
 SEO
         1 OETFSDYWKL LP
 HITS AT:
NTE modified
                ----- location ----- description
 type
 ______
 terminal mod.
                Gln-1
                                        N-acetyl
terminal mod. Pro-12
                                       C-terminal amide
modification
                                        undetermined modification
CRN 75 201984-38-519 REGISTRY
 SEQ
         1 OETFSDYWKL LP
           HITS AT:
           2-11
 SEO
         1 QETFSDYWKL LP
           HITS AT:
           2-11
L12
     ANSWER 16 OF 25 REGISTRY COPYRIGHT 2002 ACS
     L-Prolinamide, N2-acetyl-L-glutaminyl-L-prolyl-L-threonyl-L-phenylalanyl-L-
     seryl-L-.alpha.-aspartyl-L-tyrosyl-L-tryptophyl-L-lysyl-L-leucyl-L-leucyl-
      trifluoroacetate (salt) (9CI) (CA INDEX NAME)
     12
 SOL
RN 201984-24-9 REGISTRY
         1 QPTFSDYWKL LP
 SEQ
```

```
HITS AT: 2-11
   NTE modified
                    ----- location ----- description
    terminal mod. Gln-1 - N-acetyl terminal mod. Pro-12 - C-terminal amide modification - undetermined modification
  RN 201984-24-9 REGISTRY
   SEO
                       1 QPTFSDYWKL LP
                             ------
   HITS AT:
                           2-11
                       1 OPTFSDYWKL LP
   SEO
                             HITS AT:
                           2-11
  L12 ANSWER 17 OF 25 REGISTRY COPYRIGHT 2002 ACS
             L-Aspartamide, N-acetyl-L-methionyl-L-prolyl-L-arginyl-L-phenylalanyl-L-
              methionyl-L-.alpha.-aspartyl-L-tyrosyl-L-tryptophyl-L-.alpha.-
              glutamylglycyl-L-leucyl-, trifluoroacetate (salt) (9CI) (CA INDEX NAME)
   SQL
             12
 RN 201984-22-7 REGISTRY
   SEQ
                       1 MPRFMDYWEG LN
                           HITS AT: 2-11
  NTE modified
       type ----- location ----- description
 terminal mod. Met-1 - N-acetyl
terminal mod. Asn-12 - C-terminal amide
modification - undetermined modification
RN 201984=22-7 REGISTRY
  SEO
                      1 MPRFMDYWEG LN
                           ======= ==
  HITS AT:
                           2-11
  SEO
                      1 MPRFMDYWEG LN
                            HITS AT:
                          2-11
            ANSWER 18 OF 25 REGISTRY COPYRIGHT 2002 ACS
  L12
             L-A spartamide, \ N-acetyl-L-methionyl-L-prolyl-L-arginyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phen
             methionyl-L-.alpha.-aspartyl-L-tyrosyl-L-tryptophyl-L-.alpha.-
             glutamylglycyl-L-leucyl- (9CI) (CA INDEX NAME)
 SQL
           12
RNE 201984-21-6' REGISTRY
  SEO
                      1 MPRFMDYWEG LN
                           HITS AT: 2-11
  NTE modified
                   ----- location ----- description
 terminal mod. Met-1
terminal mod. Asn-12
                                                                        N-acetylC-terminal amide
```

```
L12 ANSWER 19 OF 25 REGISTRY COPYRIGHT 2002 ACS
      L-Phenylalaninamide, N-acetyl-L-threonylglycyl-L-prolyl-L-alanyl-L-
      phenylalanyl-L-threonyl-L-histidyl-L-tyrosyl-L-tryptophyl-L-alanyl-L-
      threonyl-, trifluoroacetate (salt) (9CI) (CA INDEX NAME)
 SOL
      12
RN 201984-20-5 REGISTRY
 SEQ
          1 TGPAFTHYWA TF
 HITS AT:
            3-12
 NTE modified
                      -- location -----
  type
                                                 description
 terminal mod.
                  Thr-1
                                            N-acetyl
 terminal mod.
                  Phe-12
                                           C-terminal amide
 modification
                                           undetermined modification
RN 201984-20-5 REGISTRY
 SEQ
          1 TGPAFTHYWA TF
 HITS AT:
            3-12
 SEQ
          1 TGPAFTHYWA TF
 HITS AT:
            3-12
 L12
      ANSWER 20 OF 25 REGISTRY COPYRIGHT 2002 ACS
      L-Histidine, L-prolyl-L-alanyl-L-phenylalanyl-L-seryl-L-arginyl-L-
      phenylalanyl-L-tryptophyl-L-seryl-L-.alpha.-aspartyl-L-leucyl-L-seryl-L-
      alanylglycyl-L-alanyl- (9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN
      107: PN: WO0024782 SEQID: 140 claimed sequence
      725: PN: WO0183525 TABLE: 13 claimed protein
 CN
 SOL
 RN=186180-25-6 REGISTRY
 SEQ
          1 PAFSRFWSDL SAGAH
 HITS AT:
            1-10
 L12
      ANSWER 21 OF 25 REGISTRY COPYRIGHT 2002 ACS
      L-Tyrosine, L-prolyl-L-arginyl-L-prolyl-L-alanyl-L-leucyl-L-valyl-L-
      phenylalanyl-L-alanyl-L-.alpha.-aspartyl-L-tyrosyl-L-tryptophyl-L-.alpha.-
      glutamyl-L-threonyl-L-leucyl- (9CI) (CA INDEX NAME)
 OTHER NAMES:
      106: PN: WO0024782 SEQID: 139 claimed sequence
 CN
      724: PN: WOO183525 TABLE: 13 claimed protein
 CN
 SQL
     15
RN REGISTRY
 SEQ
          1 PRPALVFADY WETLY
 HITS AT:
            5-14
      ANSWER 22 OF 25 REGISTRY COPYRIGHT 2002 ACS
 L12
 CN
      L-Valine, L-isoleucyl-L-.alpha.-aspartyl-L-arginyl-L-alanyl-L-prolyl-L-
      threonyl-L-phenylalanyl-L-arginyl-L-.alpha.-aspartyl-L-histidyl-L-
      tryptophyl-L-phenylalanyl-L-alanyl-L-leucyl- (9CI) (CA INDEX NAME)
 OTHER NAMES:
```

```
CN
      105: PN: WO0024782 SEQID: 138 claimed sequence
      723: PN: WO0183525 TABLE: 13 claimed protein
 CN
 SQL
      15
RN 86180-23-4 REGISTRY
 SEQ
          1 IDRAPTFRDH WFALV
                ======
 HITS AT:
            5-14
 L12
      ANSWER 23 OF 25 REGISTRY COPYRIGHT 2002 ACS
      L-Phenylalanine, L-threonylglycyl-L-prolyl-L-alanyl-L-phenylalanyl-L-
      threonyl-L-histidyl-L-tyrosyl-L-tryptophyl-L-alanyl-L-threonyl- (9CI)
                                                                            (CA
      INDEX NAME)
 OTHER NAMES:
 CN
      104: PN: WO0024782 SEQID: 137 claimed sequence
      722: PN: WO0183525 TABLE: 13 claimed protein
 CN
 SOL
      12
RN 186180=22=3 REGISTRY
 SEO
          1 TGPAFTHYWA-TF
              HITS AT:
            3-12
 L12
      ANSWER 24 OF 25 REGISTRY COPYRIGHT 2002 ACS
 CN
      L-Phenylalanine, L-valyl-L-glutaminyl-L-asparaginyl-L-phenylalanyl-L-
      isoleucyl-L-.alpha.-aspartyl-L-tyrosyl-L-tryptophyl-L-threonyl-L-
      glutaminyl-L-glutaminyl- (9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN
      103: PN: WO0024782 SEQID: 136 claimed sequence
 CN
      721: PN: WO0183525 TABLE: 13 claimed protein
 SQL
     12
RN 186180 21 2 A REGISTRY
          1 VQNFIDYWTQ QF
             HITS AT:
            2 - 11
 L12 ANSWER 25 OF 25 REGISTRY COPYRIGHT 2002 ACS
 CN L-Asparagine, L-methionyl-L-prolyl-L-arginyl-L-phenylalanyl-L-methionyl-L-
      .alpha.-aspartyl-L-tyrosyl-L-tryptophyl-L-.alpha.-glutamylglycyl-L-leucyl-
      (9CI)
             (CA INDEX NAME)
 OTHER NAMES:
     102: PN: WO0024782 SEQID: 135 claimed sequence
 CN
     720: PN: WO0183525 TABLE: 13 claimed protein
 SQL
     12
CRN 186180-20-1 REGISTRY
         1 MPRFMDYWEG LN
 SEQ
            HITS AT:
```

FILE 'HOME' ENTERED AT 12:47:09 ON 30 MAY 2002

2-11